

REMARKS

Entry of the foregoing, further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.114, are respectfully requested.

Further to the Advisory Action of November 30, 2005, Applicants note with appreciation that the rejection under 35 U.S.C. § 112 was withdrawn. Claims 1-25 stand pending. Claims 11-22 stand withdrawn. Claim 1 is amended herein to recite that the administration of the substance that inhibits a pro-inflammatory cytokine causes a reduction of adhesion formation. Basis for the amendment may be found throughout the specification and claims as-filed, including the preamble of claim 1. Thus, no new matter is submitted herein.

Rejection under 35 U.S.C. § 102

Claims 1-10 and 23-25 stand rejected under 35 U.S.C. § 102(e) as purportedly anticipated by Reuben *et al.* (United States Patent Publication No. US 2002/0072596) ("Reuben").

To anticipate a claimed invention under 35 U.S.C. § 102, a reference must teach each and every element of the claimed invention. See *Lindeman Maschinenfabrik GmbH v. American Hoist and Derrick Company*, 221 USPQ 481, 485 (Fed. Cir. 1984). Applicants submit that Reuben does not disclose each element of the claims.

Specifically, Applicants submit that Reuben does not disclose lactoferrin as used in the methods of the present invention. Claim 1, for example, is directed to administering a therapeutically effective amount of a substance that inhibits a pro-inflammatory cytokine to a patient wherein the administration results in a reduction of adhesion formation. Reuben does not disclose administration of lactoferrin in this regard. Instead, Reuben discloses a large number of sequences to be used with a large number of diseases.

Reuben merely discloses a splice variant of human lactoferrin. This splice variant comprises the sequence EDCIALKG EADA (SEQ ID NO:6) as compared to known human lactoferrin which comprises the corresponding sequence EDCIALV LKG EADA. Table 2 (paragraph [0825]) of Reuben provides a list of 157

GenBank accession numbers referring not only to lactoferrin related ESTs but also to a large number of lactoferrin cDNAs from various species, of which 10 are human lactoferrin cDNAs. Paragraph [0012] of Reuben referring to Table 2, states that "Table 2 indicates public ESTs, of which at least one, two, three, four, five, ten, or more of any one or more of these public EST sequences are optionally excluded from certain embodiments of the invention". Thus, Reuben discloses the exclusion human lactoferrin from its disclosed uses.

Further, Reuben discusses a large number of conditions, diseases and disorders which can be treated with the polynucleotides (sense and/or antisense), polypeptides, agonists or antagonists including antibodies. However, there is no disclosure of a specific mechanism or desired biological effect of the treatment. All possible results seem equally desirable. Ruben provides examples of preferred diseases and disorders. Paragraph [0422] states "[I]n preferred embodiments, compositions of the invention (including polynucleotides, polypeptides and antibodies of the invention, and fragments and variants thereof) may be used in the diagnosis, detection and/or treatment of diseases and/or disorders relating to iron storage disorders, heme biosynthesis disorders, immune system disorders (e.g., anemia, cirrhosis, and/or as described under "Immune activity" below), neural disorders (e.g., as described under "Neural Activity and Neurological Diseases" below), infectious diseases (e.g., as described in "Infectious Disease" below), and hyperproliferative disorders (e.g., as described under "Hyperproliferative Disorders" below)." Preferred immune systems disorders are listed in paragraphs [0429] – [0497]. Preferred blood-related disorders are listed in paragraphs [0501] – [0523]. Preferred hyperproliferative disorders are listed in paragraphs [0527] – [0541]. Preferred renal disorders are listed in paragraphs [0561] – [0564]. Preferred cardiovascular disorders are listed in paragraphs [0567] – [0579]. Preferred respiratory disorders are listed in paragraphs [0583] – [0584]. Preferred disorders associated with neovascularization or neoangiogenesis are listed in paragraphs [0587] – [0600]. Preferred disorders related to cell survival and apoptosis are listed in paragraphs [0612] – [0615]. Preferred neurological disorders are listed in paragraphs [0626] – [0642]. Preferred endocrine disorders are listed in paragraphs [0647] – [0654]. Preferred reproductive system disorders are listed in paragraphs [0658] – [0670].

Preferred infectious diseases are listed in paragraphs [0673] – [0675]. Preferred gastrointestinal disorders are listed in paragraphs [0684] – [0690].

Thus, several hundred "preferred" conditions, diseases and disorders which can be treated with the claimed lactoferrin polynucleotides, polypeptides, agonists or antagonists are listed by Reuben. The treatment of hypertrophic scars or keloids is given as example of a condition involving neoangiogenesis, which can be treated with lactoferrin polynucleotides, polypeptides, agonists or antagonists, paragraph [0590] – [0591]. Thus, the treatment of scars is only one of a very large laundry list of diseases, which are purportedly treatable with the polypeptides, agonists or antagonists in question. Reuben's disclosure is merely a generic description of most, if not all, possible uses of any polypeptide, agonists or antagonists. Further, Reuben does not disclose the reduction of adhesion formation from the administration. Applicant requests that the rejections under 35 U.S.C. § 102 be withdrawn.

CONCLUSION

It is respectfully submitted that all rejections have been overcome by the above amendments. Thus, Notice of Allowance is respectfully requested.

In the event that there are any questions relating to this Amendment or the application in general, it would be appreciated if the Examiner would contact the undersigned attorney by telephone at (703) 836-6620 so that prosecution of the application may be expedited.

Respectfully submitted,

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